KEY TO TREES AND SHRUBS SUITABLE FOR PLANTING IN WEST VIRGINIA

¹ Soil Drainage Class:

Well Drained: Water is removed from the soil readily but not rapidly and available to plants most of the growing season. Wetness does not inhibit growth of roots for significant periods.

Moderately Well Drained: Water is removed from the soil somewhat slowly during some periods. These soils are wet for only short time during the growing season. They may contain a slowly pervious layer or receive periodic heavy rainfall or both.

Somewhat Poorly Drained: Water is removed slowly enough that the soil is wet for significant periods during the growing season. Wetness markedly restricts the growth of some plants. They commonly have a slowly pervious layer or receive periodic heavy rainfall or both.

Poorly Drained: Water is removed so slowly that the soil remains saturated for significant portions or remains wet for long periods during the growing season. Free water is commonly at the surface. Poor drainage may result from high water tables, slowly pervious layers within the profile, seepage or any combination of these factors.

² Shade Tolerance: Describes the relative tolerance for this plant to grow in shade conditions.

Intolerant: Will not tolerate shaded conditions.

Intermediate: Will tolerate partially shaded conditions.

Tolerant: Will tolerate full shade and usually does not prefer full sun.

- ³ **Height at 20 Years**: Under optimum conditions is the approximate maximum height at 20 years in feet.
- Mature Height: The approximate height of the plant at maturity under good conditions.
- Native: The plants listed in this column that are marked "yes" are considered native (i.e., they occur naturally in West Virginia). This listing of species is not all-inclusive. There are many more native plants which occur and could be suitable for use in conservation plantings.

⁶ Windbreaks Screens Barriers or Other: A spacing in this column indicates that this plant is suited to linear plantings designed to hide unsightly areas from public view, reduce noise, function as windbreaks or be suitable for some form of ornamental planting.

Wildlife

Food: This plant is suited to provide wildlife food in the form of either browse of foliage, twigs, bark or fruit.

Cover: This plant is suited to provide winter cover, nesting cover or shelter by its growth characteristics.

Corridors: These plants are suited to use as corridors or travel lanes including riparian corridors through which wildlife may travel between habitat types. Planted rows should be staggered.

Timber Production Spacing: This spacing should be used if timber production is desired.

9 Additional Plant Information Available:

Plant Facts: Information from the USDA Plants database that provide brief descriptions of a plant, its uses and offer establishment recommendations.

Plant Guide: Information from the USDA Plants database that is similar to Plant Sheets but are usually more extensive and more narrative, and are typically referenced to source documents.

10 Commercial Availability

Readily: Many varieties exist and/or is routinely available through commercial state nurseries and/or Plant Material Centers.

Somewhat Available: Somewhat limited availability of planting stock especially from commercial nurseries and may be more readily available from nurseries specializing in native plants or from regional Plant Material Centers.

Rarely: Very difficult to locate plant stock or no known cultivated varieties exist. May only be available from native plant nurseries, Plant Material Centers or from localized sources.

MOATSL (Revised April 2006)

WV NRCS

Table1 Shrubs Suitable for Establishment

Activation			Shade	Height at				Sı	uitable Us	e(s)		Additional	1	Commercial
Aller Smooth Class Tolerance 20 Years Married Note Comment Frooty		Soil Drainage				_			_					
Answering	SHRUBS			_	· · ·	Native ⁵			vviidille				Remarks	Availability 9
Annex services products of the proof of the					waturity		_	Food	Cover	Corridors	Spacing	Available 8		
Annual processes	Alder, Smooth	Somewhat Poorly -	Toloront	10 ff	20.#	Vaa		v		v	E 0 #4	Dient Foote	Adapted to wetter sites and along streams below 2600 ft. Good	Doodily
Annus angles Poorly Poorly Poorly Annus angles Poorly Annus angles	(Alnus serrulata)	Poorly	Tolerant	10 11	20 II	res		^		^	5-0 IL	Plant Facts		Readily
Andread projects Foody Foody Foody Foody Foody Foods Foody Foods Foods	Alder, Speckled	,	Intermediate	12 ft	16 ft	Vec		Y		Y	5_8 ft	Plant Guide		Readily
National Accordance Poorly	, ,	,	intermediate	12 11	10 11	163		^		^	J-0 It	Flant Guide	wetland wildlife cover and food source.	readily
Victorium nortextum Peorly			Intermediate	10 ft	10 ft	Yes		X	X	x	3-6 ft		Excellent wildlife food source. Adapted for wetter conditions	
Vaccinium corymbosum Poorly Intermetal	(,	,											·	Available
Billottocks Conclusions Conc		,	Intolerant	6 ft	10 ft	Yes		Х			3-6 ft			Readily
Controllerinitys occidentalss Poorly Foreign Controllerinity (Controllerinity (Cont		,												,
Cinkeberly, Red (Photolia pyriolis) Peorly (Poorly (Photolia pyriolis) Peorly (Photolia pyriolis)			Tolerant	10 ft	20 ft	Yes		Х	Х		5-8 ft			Rarely
Photoins pyriolog Pocyty Moderately Pocyty Moderately Pocyty Moderately Pocyty Moderately Pocyty Moderately Pocyty		,										Plant Guide		,
Cabappel, Sargents Meli - Somewhal Indicerant 10 nt			Intolerant	5 ft	5 ft	Yes		Х			3-6 ft	No		Readily
Malus bacotals Poorly Imborant 10 ft 10 ft No 2-3 ft X 3-6 ft No Extremely cold hearty fruit bearing tree-shrub. Wildlife utilize the fruit Readily Carbaspie, Southern Malus bacotals Poorly Mell - Moderately Mell 15 ft 25 ft Yes 2-3 ft X 5-8 ft Plant Facts Pla														
Cabappé, Stortinan Weil - Somewhat Poorty Footy Foot			Intolerant	10 ft	10 ft	No	2-3 ft	Х			3-6 ft	No		Readily
Makus bacata Poorty Infolerant 10 ft 10 ft No 2-3 ft X 3-5 ft No There are many cultivars. Readily	, ,													
Crabapple, Southern Well Moderately We			Intolerant	10 ft	10 ft	No	2-3 ft	Х			3-6 ft	No		Readily
Mahis angustifolia Well Intermediate 15 ft 25 ft 7 ft														
Crabapple Sweet (Malus connaria) Well Graberry, Highbush (Wolland the Connaria) Moderately Well Poorly Dopwood, Flowering (Cornus forcida) Poorly Dopwood, Gray (Cornus forcida) Dopwood, Redosier (Cornus serices) Dopwood, Redosier (Cornus serices) Dopwood, Redosier (Cornus serices) Dopwood, Rilling (Cornus serices) Dopwood, Rilling Dopwood, Rilling Dopwood, Rilling Dopwood, Redosier (Cornus serices) Dopwood, Rilling Dopwood, Rilling Dopwood, Rilling Dopwood, Rilling Dopwood, Rilling Dopwood, Rilling Dopwood, Redosier (Cornus serices) Dopwood,			Intermediate	15 ft	25 ft	Yes	2-3 ft	Х			5-8 ft	Plant Facts		Rarely
Melis coronaria Well Intermediate 10 ft 25 ft Yes 2-3 ft X 5-8 ft No Native craspipe common throughout the state. Readily	·												' ''	
Camberry, Highbush Moderately Well Poorty			Intermediate	10 ft	25 ft	Yes	2-3 ft	Х			5-8 ft	No	Native crabapple common throughout the state.	Readily
Well - Somewhat Tolerant 12 ft	` '											Plant Facts	Attractive screen and hedgerow plant. Useful in ornamental and	
Cornus floridary Poorly Cornus floridary Olerant 20 ft 30 ft Yes 2-3 ft X X X 5-8 ft Plant Guide Poorly Cornus floridary Cornus flori	,, ,	,	Intolerant	12 ft	12 ft	Yes	2-3 ft	Х	Х		3-6 ft			Readily
Corrus florage Poorly Dogwood, Gray Moderately Well - Somewhat Poorly Dogwood, Gray Corrus arecemose) Somewhat Poorly Dogwood, Redosier Corrus sericee) Poorly Po	,	Well - Somewhat	T.1	00.5	00.5		000		· ·		400		. 0	D !!!
Cornus racemosa Somewhat Poorty Dogwood, Redosier Cornus saericea Dogwood, Redosier Cornus saericea Dogwood, Redosier Cornus saericea Dogwood, Silky Poorty Foorty	(Cornus florida)	Poorly	lolerant	20 π	30 π	Yes	2-3 π	X	X		4-8 π	Plant Guide	by deer, rabbits. Often used as an ornamental.	Readily
Commissacemosa Somewhat Poorty Dogwood, Readily Cornus sericea Poorty Po	Dogwood, Gray	Moderately Well -	Talarant	10 ft	1E #	Vaa	22#	v	v		F 0 #	Dignt Facts	Excellent for small screens, streambank stabilization and as an	Doodily
Comus sericea Poorty Interineural 10 ft 20 ft 15 ft 12 f	(Cornus racemosa)	Somewhat Poorly	Tolerani	10 11	15 11	res	2-3 IL	^	^		5-0 IL	Plant Facts	ornamental.	Readily
Comus serices Poorty Tolerant 12 ft	Dogwood, Redosier	Somewhat Poorly -	Intermediate	10 ft	20 ft	Voc	2_3 ft		Y	Y	5.9 ft	Plant Guido	Excellent streambank cover. With some wildlife benefits	Peadily
Cornus amomum Poorly Cornus amomum Poorly Elderberry Cornus amomum Poorly Cornus amomum Poorly Cornus amomum Poorly Cornus amomum Poorly Intolerant Poorly Cornus amomum Poorly	(Cornus sericea)	Poorly	intermediate	10 11	20 10	163	2-511		^	^	3-0 It	Flant Guide	Excellent streambank cover. With some whome benefits.	readily
Cornus amomum Poorty Foorty Foorty Foorty Foorty Foorty Foorty Flawthorn, Washington Flave Flant Guide Fla			Tolerant	12 ft	12 ft	Yes	2-3 ft	Y	¥	Y	3-6 ft	Plant Facts	Stoloniferous Produces fruit in 3 -5 years. Excellent wildlife plant	Readily
Sambucus canadensis Poorly Intolerant 7 tt			Tolerant	1210	12 10	100	2011			^	0011		, , , , , , , , , , , , , , , , , , , ,	rtcaany
Poorly Hawthorn, Washington Well - Somewhat Poorly Hawthorn, Washington Well - Somewhat Poorly Tolerant 10 ft Ves X X X S-8 ft No Provides account of the provide sex species of wildlife cover. Not as prone to spreading as some Somewhat Available Provides cover and nesting for wildlife. The leaves, twigs, and catking Available Provides cover and nesting for wildlife. The leaves, twigs, and catking Available Provides cover and nesting for wildlife. The leaves, twigs, and catking Available Provides cover and nesting for wildlife. The leaves, twigs, and catking Available Provides cover and nesting for wildlife. The leaves, twigs, and catking Available Provides cover and nesting for wildlife. The leaves, twigs, and catking Available Provides cover and nesting for wildlife. The leaves, twigs, and catking Available Provides cover and nesting for wildlife. The leaves, twigs, and catking Available Provides cover and nesting for wildlife. The leaves, twigs, and catking Available Provides cover and nesting for wildlife. The leaves, twigs, and catking Available Provides cover and nesting for wildlife. The leaves, twigs, and catking Somewhat Poorly Provides cover and nesting for wildlife. The leaves, twigs, and catking Somewhat Provides cover and nesting for wildlife. The leaves, twigs, and catking Somewhat Provides cover and nesting for wildlife. The leaves, twigs, and catking Somewhat Provides cover and or antimity Provides cover and or antim			Intolerant	7 ft	7 ft	Yes		X	X	x	3-6 ft			Readily
Crataegus phaenopyrum Poorly Intermediate 25 ft 25 ft Yes 3-6 ft X X 5-8 ft No Introduced hawthorns. Available Intolerant Tolerant To	,		moiorani									Plant Guide		,
Caralegus pnaenopyrum Poorty Foorty Hazelnut, American Corylus americana Well - Moderately Well - Somewhat Corylus americana Moderately Well - Somewhat Corylus americana Moderately Well - Somewhat Carpinus caroliniana Carp			Intermediate	25 ft	25 ft	Yes	3-6 ft		Х	х	5-8 ft	No		
Corylus americana Well Somewhat Holly, American (lex opaca) Poorly Poorly Poorly Tolerant 20 ft 60 ft Yes 3-6 ft X X 5-8 ft Plant Facts Evergreen. It is important to plant males as well as females if berry production is desired. Used as winter cover and ornamental. Readily Plant Facts Pl														
Holly, American (llex opaca) Well - Somewhat Poorly Hornbeam, American (Carpinus caroliniana) Lespedeza, Bicolor (Lespedeza bicolor) Lespedeza, Shrub (Lespedeza thunbergii) Lespedeza thunbergii) Locust, Bristly (Well - Moderately Well - Modera	*		Tolerant	10 ft	10 ft	Yes		Х	Х		3-6 ft	Plant Guide		
Carpinus caroliniana	, ,													Available
Hornbeam, American (Carpinus caroliniana) Lespedeza, Bicolor (Lespedeza bicolor) Mell - Somewhat Poorly Locust, Bristly (Robinia hispida) Nannyberry (Viburnum lentago) Nannyberry Ninebark Moderately Well - Somewhat Poorly Tolerant 15 ft 40 ft Yes X X 5-8 ft Plant Facts Plant Guide Plant Facts This sepcies produces large amounts of seed eaten by many birds and mammals. Found along streams and rivers. Excellent riparian Available Readily Readily Readily Readily Readily Readily No Well - Moderately Well Intolerant Poorly Well - Moderately We			Tolerant	20 ft	60 ft	Yes	3-6 ft		Х	Х	5-8 ft	Plant Facts		Readily
Carpinus caroliniana Somewhat Poorly Tolerant	, ,	•										Dignt Foots	,	Comowhat
Lespedeza, Bicolor (Lespedeza bicolor) Well - Moderately Well - Somewhat Poorly Locust, Bristly (Robinia hispida) Nannyberry (Viburnum lentago) Well - Poorly Well - Somewhat Viburnum lentago Nannyberry (Viburnum lentago) Well - Moderately Well -	*		Tolerant	15 ft	40 ft	Yes		Х		Х	5-8 ft			
(Lespedeza bicolor) Well Intolerant 6 ft 6 ft No X 2 ft Plant Facts many species of wildlife. Best seeded directly. Lespedeza, Shrub (Lespedeza thunbergii) Locust, Bristly (Robinia hispida) Nannyberry (Viburnum lentago) Well - Poorly Tolerant 25 ft 25 ft Yes 3-6 ft X X X 5-8 ft Plant Facts wall blolerant wildlife, hedgerow, screen and ornamental shrub suited to a Variety of sites. Commercially available and common throughout Wv. Readily Tolerant 25 ft 25 ft Yes 3-6 ft X X X X 5-8 ft Plant Guide Plant Facts variety of sites. Commercially available and common throughout Wv. Readily Readily Readily Tolerant 25 ft 7 ft Yes 3-6 ft X X X X 5-8 ft Plant Guide Variety of conditions including nuclear attack. Readily Tolerates a wide variety of conditions including nuclear attack.	,	,												
Lespedeza, Shrub (Lespedeza thunbergii) Locust, Bristly (Robinia hispida) Nannyberry (Viburnum lentago) Well - Poorly Vell - Somewhat Viburnum lentago) Well - Somewhat Viburnum lentago Ville - Somewhat Ville - Ves	'		Intolerant	6 ft	6 ft	No		Х			2 ft	Plant Facts	· '	Readily
(Lespedeza thunbergii) Poorly Intolerant 8 tt 8 tt No X 2-3 tt Plant Facts source for many species of wildlife. Best seeded directly. Readily Readily Readily Readily Readily Readily Readily Readily Readily Well - Moderately Well Intolerant 7 tt 8 tt 8 tt 8 tt 8 tt 8 tt 9 to 8 tt 9 to 8 tt 9 to 9 t												-	, ,	
Locust, Bristly (Robinia hispida) Nannyberry (Viburnum lentago) Well - Poorly No Well - Somewhat No Excellent for erosion control. Minimal wildlife value. Mainly used for reclamation of mined sites. Many varieties available. Readily Readily Readily No Plant Guide Plant Facts Variety of sites. Commercially available and common throughout WV. Ninebark Well - Somewhat No Excellent for erosion control. Minimal wildlife value. Mainly used for reclamation of mined sites. Many varieties available. Readily Readily Tolerant Toleran	'		Intolerant	8 ft	8 ft	No		Х			2-3 ft	Plant Facts		Readily
(Robinia hispida) Well Intolerant 7 ft 7 ft Yes 3-6 ft	` '	,				.						i	, ,	
Nannyberry (Viburnum lentago) Well - Poorly Tolerant 25 ft Yes 3-6 ft X X X 5-8 ft Plant Guide Plant Facts Variety of sites. Commercially available and common throughout WV. Readily Readily Tolerant Integrant 10 ft 10 ft 10 ft Yes Yes Yes Tolerant Tolerants a wide variety of conditions including nuclear attack. Readily			Intolerant	7 ft	7 ft	Yes	3-6 ft				-	No		Readily
(Viburnum lentago) Veil - Poony 1 Olerant 25 π Yes 3-6 π X X X X Yes <			Talanti	05."	05."	V	2.6.5	v	v	v	F C "	Plant Guide		D-1 17
Ninebark Well - Somewhat Integrant 10 ft 10 ft Ves V 5.8 ft Plant Guido Tolerates a wide variety of conditions including nuclear attack.		vveii - Poorly	lolerant	25 ft	25 ft	Yes	3-6 ft	X	X	X	5-8 ft			Readily
(Physocarpus conditions) Poorly Intolerant 10 π 10 π 1es A 5-6 π Plant Guide Difficult to condicate and catabolished. Lland by a variety of signation Readily	`	Well - Somewhat	Intol	10 #	10 #	V		v			E 0 #	Dient Cold	, , ,	Doc dille
to riyate an pulsificant to eradicate once established. Used by a variety of riparian	(Physocarpus opulifolius)	Poorly	intolerant	10 π	10 π	Yes		X			5-8 TT	Plant Guide	Difficult to eradicate once established. Used by a variety of riparian	Readily
Pawpaw Moderately Well - Tolerant 30 ft 35 ft Yes X 4-8 ft Plant Guide Site specific and often difficult to establish. Common in floodplains in Somewhat	Pawpaw	Moderately Well -	Tolerant	30 ff	35 ft	Vac		У			1_8 ft	Plant Guide	Site specific and often difficult to establish. Common in floodplains in	Somewhat
(Asimina triloba) Poorly Tolerant 30 it 33 it 1es A 4-6 it Frank Suite the understory. Good wildlife food source. Available	(Asimina triloba)	Poorly	Tolerant	30 II	35 II	169		^			4-0 IL	FIAIIL GUIDE	the understory. Good wildlife food source.	Available

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Table1 Shrubs Suitable for Establishment

		Shade Tolerance ²	Height at	. I Height at		Suitable Use(s)					Additional		
SHRUBS	Soil Drainage				Native ⁵	Windbreaks Screens		Wildlife 7	,	Wildlife	Plant	Remarks	Commercial Availability 9
	5.005	1010101100	20 100.0	Maturity 4		Barriers or Other ⁶	Food	Cover	Corridors	Spacing	Available 8		7114
Pepperbush, Mountain Sweet (Clethra acuminata)	Well - Somewhat Poorly	Tolerant	8 ft	15 ft	Yes	2-6 ft		Х		5-8 ft	No	Attractive summer-flowering shrub usually found on sandstone based soils.	Rarely
Sourwood (Oxydendrum arboreum)	Somewhat Poorly - Poorly	Intermediate	20 ft	35 ft	Yes		Х			5-8 ft	No	Beautiful native ornamental often difficult to establish. Wildlife browse the sour tasting foliage. Prized for honey production.	Readily
Spicebush, Northern (<i>Lindera benzoin</i>)	Moderately Well - Poorly	Intermediate	12 ft	15 ft	Yes		X			5-8 ft	Plant Guide	Attractive fragrant understory tree common throughout the state. Sometimes planted as an ornamental.	Readily
Steeplebush (Spiraea tomentosa)	Somewhat Poorly - Poorly	Intolerant	4 ft	6 ft	Yes	2-3 ft	Х		Х	3-6 ft	No	Rhizomatous growth form that provides dense wildlife cover relatively quickly. Usually found on wetter sites.	Readily
Swamp Rose (Rosa palustris)	Somewhat Poorly - Poorly	Tolerant	8 ft	8 ft	Yes	2-3 ft		Х	Х	3-6 ft	Plant Guide	Prefers permanent saturation. May spread under suitable conditions.	Somewhat Available
Possumhaw (Viburnum cassinoides)	Somewhat Poorly - Poorly	Tolerant	15 ft	15 ft	Yes		X	Х	Х	5-8 ft	No	Excellent wildlife shrub in wetter conditions. Suited to the eastern mountain counties.	Rarely
Winterberry (llex verticillata)	Somewhat Poorly - Poorly	Intermediate	10 ft	10 ft	Yes	3-6 ft	Х	х	Х	3-6 ft	Plant Facts	Fruit is poisonous to humans. High elevation deciduous holly suited to the eastern mountain counties. Excellent for wildlife.	Readily
Willow, Purpleosier (Salix purpurea)	Well - Poorly	Intolerant	10 ft	10 ft	No	2-3 ft				-	Plant Facts	Excellent streambank stabilization and bio engineering plant suitable to dormant plantings. Many cultivars are available.	Somewhat Available
Willow (Salix sp.)	Well - Poorly	Intolerant	10 ft	10 ft	Yes	2-3 ft				-	No	Many varieties of native and non-native varieties. Excellent streambank stabilization and bio engineering plant suitable to dorman	Somewhat Available
Witch Hazel (Hamamelis virginiana)	Well - Somewhat Poorly	Intermediate	15 ft	20 ft	Yes		Х			5-8 ft	No	Good native wildlife food source. Sometimes hard to establish.	Readily
Yew, American (<i>Taxus canadensis</i>)	Well - Moderately Well	Tolerant	5 ft	5 ft	Yes	2-3 ft		Х		3-6 ft	No	Used as an ornamental. Birds eat the berries. Adapted to high elevations in the eastern mountain counties. Browsed heavily by	Readily

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Table 2
Trees Suitable for Establishment

								Suitabl	e Use(s)		1			
			Height	Aprox.		Windbreaks		Wildlife 7	036(3)			Additional		
TREES	Soil Drainage	Shade	at 20	Height at	Native 5	Screens		vviidille		Wildlife	Wood	Plant	Remarks	Commercial
	Class 1	Tolerance ²	Years ³	Maturity 4		Barriers or	Food	Cover	Corridors	Spacing	Production	Information		Availability 10
			icais	Maturity		Other ⁶		5515.	551114515	opasg	Spacing ⁸	Available 9		
Alder, European Black	Well - Moderately		40.6	CO #	NI-				~	0.40.5		Diant Foots	Excellent for reclamation. Nitrogen fixer. Good for hedgerow and	Deedile.
(Alnus glutinosa)	Well	Intermediate	40 ft	60 ft	No	8-12 ft *			Х	8-12 ft		Plant Facts	windbreaks where non-natives are acceptable.	Readily
Ash, Green	Moderately Well -	1.1	05.0	70.0		0.40.6	v		~	0.40.6		Discot Freets	The seeds are eaten by a number of birds and mammals.	D ill
(Fraxinus pennsylvanica)	Poorly	Intermediate	35 ft	70 ft	Yes	8-12 ft	X		Х	8-12 ft		Plant Facts	Extensively planted as a shade and ornamental tree.	Readily
Ash, White	Well - Somewhat	Intermediate	40 ft	90 f	Voc	8-12 ft	Х	Х	Х	8-12 ft	20 X 20 ft	Plant Guide	Excellent all purpose ornamental, wildlife, and shade tree. Has	Readily
(Fraxinus americana)	Poorly	Intermediate	40 11	80 ft	Yes	0-12 11	^	^	^	0-12 IL	20 X 20 IL	Plant Guide	commercial timber value.	Readily
Basswood	Well - Moderately	Intermediate	45 ft	80 ft	Yes	8-12 ft	Х		Х	8-12 ft	6 - 8 ft	Plant Guide	Basswood is good browse and buds are important for birds and deer	Readily
(Tilia americana)	Well	intermediate	7011	00 11	103	0-12 10	^		^	0-12-10	0-010		in winter. Planted as a shade tree or ornamental.	•
Birch, Black	Well - Somewhat	Intolerant	40 ft	80 ft	Yes			х	х	8-12 ft		Plant Facts	Native riparian tree. Its young twigs, buds, foliage and seeds are	Somewhat
(Betula nigra)	Poorly	moorant	1010	00 11	100			^		0 12 10		Plant Guide	used by a variety of wildlife.	Available
Blackgum	Well - Somewhat	Tolerant	30 ft	95 ft	Yes		Χ			8-12 ft		Plant Facts	Black bears, foxes, wood ducks, wild turkeys, robins, brown	Readily
(Nyssa sylvatica)	Poorly											Plant Guide	thrashers, thrushes, and flickers frequently eat the fruit.	,
Boxelder	Well - Poorly	Intermediate	35 ft	60 ft	Yes				Х	8-12 ft		Plant Guide	Very quick growing. Found along streams and frequently flooded	Readily
(Acer negundo)	Mall Careauthat												areas. Relatively short lived and often disease prone.	,
Cedar, Northern White	Well - Somewhat Poorly	Intermediate	25 ft	50 ft	Yes	8-12 ft		Х		8-12 ft		Plant Guide	Also called Arborvitae. Popular ornamental for screens and hedgerows in limestone areas. Provides some nesting cover.	Readily
(<i>Thuja occidentalis</i>) Cedar, Atlantic White	Moderately Well -				-							Plant Facts	Similar to Arborvitae. A coastal species not native to WV. Tolerant	
(Chamaecyparis thyoides)	Poorly	Tolerant	20 ft	90 ft	No	8-12 ft		Х		8-12 ft		Plant Guide	of wetter conditions.	Readily
Cherry, Black	Well - Somewhat												Valuable wildlife food source. Used for commercial timber and	
(Prunus serotina)	Poorly	Intolerant	40 ft	100 ft	Yes	8-12 ft	Х		Х	8-12 ft	20 X 20 ft	Plant Guide	ornamental purposes on a wide variety of soils.	Readily
Chestnut, Chinese	Well - Moderately												·	
(Castanea mollissima)	Well	Intolerant	25 ft	70 ft	No	8-12 ft	Х			8-12 ft		No	Mostly planted as an ornamental. Some wildlife utilize the chestnuts	. Readily
Cucumber-Tree	Well - Moderately								.,				Beautiful native tree common throughout WV. Minimal wildlife value.	
(Magnolia acuminata)	Well	Intolerant	40 ft	100 ft	Yes	8-12 ft			X	8-12 ft	6 - 8 ft	No	Sometimes used as an ornamental and timber species.	Readily
Cottonwood, Eastern	Well - Somewhat	lata assaultata	F0 #	400 8	V	0.40.6		х		0.40.6		Diant Foots	Fast growing and used in reclamation. Hybrids make good	Deadile
(Populus deltoides)	Poorly	Intermediate	50 ft	120 ft	Yes	8-12 ft		^		8-12 ft		Plant Facts	selections for windbreaks in multi-row installations.	Readily
Fir, Douglas	Well - Moderately	Intermediate	40 ft	200 ft	No	8-12 ft		Х		8-12 ft		Plant Facts	One of the world's most important timber species. Excellent as	Readily
(Pseudotsuga menziesii)	Well	memediale	40 II	200 II	INO	0-12 11		^		0-12 IL			wildlife, windbreak, and Christmas tree.	Reaulty
Hackberry	Well - Somewhat	Intermediate	40 ft	70 ft	Yes	8-12 ft	X		х	8-12 ft			Birds use the mature trees for nesting sites and feed on the fruit.	Readily
(Celtis occidentalis)	Poorly	micrinediate	1010	7010	100	0 12 10				0 12 10		Plant Guide	Young stands also provide shelter for game birds and rabbits.	readily
Hemlock, Eastern	Well - Somewhat	Tolerant	20 ft	100 ft	Yes	8-12 ft		Х	Х	8-12 ft		Plant Guide	This tree is versatile as a hedge, large timber species, screen and	Readily
(Tsuga canadensis)	Poorly												wildlife tree. Different cultivars exist. Native and attractive.	,
Hickory, Shagbark	Well - Moderately	Intermediate	15 ft	90 ft	Yes		Χ			8-12 ft		No	Develops deep taproot in the first few years. Needs deep alluvial	Readily
(Carya ovata)	Well Well - Somewhat												soils. Slow growing. Excellent nut producer. Some timber value. Planted as a hardy and fast-growing ornamental. Minimal wildlife	,
Honeylocust (<i>Gleditsia triacanthos</i>)	Poorly	Intolerant	35 ft	80 ft	No	8-12 ft						Plant Guide	value. Highly regarded in urban settings with many cultivars.	Readily
Larch, Japanese	Well - Somewhat												Deciduous conifer used primarily as an ornamental and timber	
(Larix kaempferi)	Poorly	Intolerant	20 ft	100 ft	No	8-12 ft *						No	trainer. Minimal wildlife value.	Readily
Locust. Black	Well - Somewhat								.,				Easy to establish. Early successional species and may be relatively	
(Robinia pseudoacacia)	Poorly	Intermediate	40 ft	70 ft	Yes	8-12 ft *	Х		X	8-12 ft		Plant Facts	short lived. Bee attractant. Nitrogen fixing species.	Readily
Maple, Red		1 - 1 1' - 1 -	40.0	00.0		0.40.6		v	v	0.40.0		Plant Facts	Valued as native ornamental. Early blooming and important as an	D III
(Acer rubrum)	Well - Poorly	Intermediate	40 ft	90 ft	Yes	8-12 ft		Х	Х	8-12 ft		Plant Guide	early pollinator for many insects. Grows in almost any condition.	Readily
Maple, Silver	Moderately Well -	Intermediate	45 ft	80 ft	Yes	8-12 ft		Х	Х	8-12 ft		Plant Guide	Important as cavity tree and somewhat important as a wildlife food	Readily
(Acer saccharinum)	Poorly	memediale	45 II	60 II	165	0-12 11		^	^	0-12 IL		Plant Facts	source. May be disease prone and susceptible to storm damage.	Reaulty
Maple, Sugar	Well - Somewhat	Tolerant	20 ft	100 ft	Yes	8-12 ft		х	х	8-12 ft		Plant Guide	Popular and long-lived shade and ornamental tree. Tolerates a wide	Readily
(Acer saccharum)	Poorly	Tolcrant	2011	100 10	103	0-12 10		^	^	0-12-10		Tiant Gaide	range of conditions. Important for cavity nesting wildlife.	readily
Mulberry, Red	Well - Somewhat	Intermediate	45 ft	70 ft	Yes		X		Х	8-12 ft		Plant Guide	Excellent wildlife tree for a variety of species especially birds.	Readily
(Morus rubra)	Poorly												Sometimes hard to establish. Very site specific.	,
Oak, Chinquapin	Well - Moderately	Intolerant	40 ft	80 ft	Yes	8-12 ft	X		Х	8-12 ft		No	Rare throughout its range. Site specific to alkaline soils and	Readily
(Quercus muehlenbergii) Oak. Northern Red	Well Mederately												limestone outcropped areas. Good riparian species.	
Oak, Northern Red (Quercus rubra)	Well - Moderately	Intermediate	35 ft	100 ft	Yes	8-12 ft	Χ		Х	8-12 ft	20 X 20 ft	Plant Guide	One of our most important and handsome oaks. Important as a	Readily
(Quercus rubra) Oak, Overcup	Well Moderately Well -												wildlife food source, timber species and ornamental. Often planted for timber and ornamental. Planted to improve wildlife	•
(Quercus lyrata)	Poorly	Intermediate	30 ft	80 ft	No	8-12 ft	Χ		Х	8-12 ft	20 X 20 ft	Plant Guide	habitat for bottomland restoration. Native to the mid-west.	Readily
(Quercus Tyrata)	POULLY	l		I				l	I				חמטונמנ זטו טטננטוזוומווט ופטנטומנוטוו. ואמנועב נט נווב ווווט-שפטנ.	1

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Table 2
Trees Suitable for Establishment

						Suitable Use(s)								
			Height	Aprox.		Windbreaks		Wildlife 7	0 000(0)			Additional		
TREES	Soil Drainage	Shade	at 20	Height at	Native 5	Screens		VVIIGING		Wildlife	Wood	Plant	Remarks	Commercial
	Class 1	Tolerance ²	Years ³	Maturity 4		Barriers or	Food	Cover	Corridors	Spacing	Production	Information		Availability 10
						Other ⁶					Spacing ⁸	Available ⁹		
Oak, Pin	Moderately Well -	Intelevent	40.6	400 #	V	0.40.6	Х			8-12 ft		Diant Foots	Adapted to wetter sites. Good mast producer and attractive	Deedile.
(Quercus palustris)	Poorly	Intolerant	40 ft	100 ft	Yes	8-12 ft	X			8-12 π		Plant Facts	ornamental. Utilized by various wildlife especially wood ducks.	Readily
Oak, Post	Well - Moderately	Intermediate	25 ft	80 ft	Yes	8-12 ft	Х		Х	8-12 ft		No	Tolerates harsh conditions and drought. Slow growing and may be	Somewhat
(Quercus stellata)	Well	memediate	25 II	00 II	res	0-12 IL	^		^	0-1211		NO	susceptible to chestnut blight. Sometimes used as an ornamental.	Available
Oak, Shingle	Well - Moderately	Intolerant	30 ft	45 ft	Yes	8-12 ft			Х	8-12 ft		No	An ornamental and shade tree, it is suitable for hedges, screens and	Readily
(Quercus imbricaria)	Well	molorant	00 10	40 10	100	0 12 10			^	0 12 10			windbreaks. Relatively low wildlife value among oaks.	,
Oak, Sawtooth	Well - Moderately	Intermediate	50 ft	70 ft	No		Х		Х	15-20 ft		Plant Facts	Wildlife oak that produces heavy amounts of small acorns attractive	Somewhat
(Quercus acutissima)	Well												to many animal species. Relatively fast growing.	Available
Oak, Swamp White	Somewhat Poorly -	Intermediate	30 ft	100 ft	Yes		Х		Х	8-12 ft		Plant Guide	Requires moist acidic conditions. Important food for wildlife such as	Readily
(Quercus bicolor) Oak, White	Poorly												squirrels, black bear, ducks and turkey. Often hybridizes.	
,	Well - Moderately	Intermediate	30 ft	100 ft	Yes	8-12 ft	Х		Х	8-12 ft	20 X 20 ft	Plant Facts	Extremely important as a timber and wildlife food tree. Slow growing and often difficult to establish.	Readily
(Quercus alba) Paulownia, Royal	Well Well - Moderately												Rapidly growing introduced species. Specialized commercial timber	ļ
(Paulownia, Royal (Paulownia tomentosa)	Well	Intermediate	60 ft	70 ft	No						10 - 20 ft	No	species. Often escapes and has no known wildlife value.	Readily
Persimmon, Common	Well - Somewhat												Used by raccoon, opossum, and various birds, including quail, wild	Somewhat
(Diospyros virginiana)	Poorly	Intermediate	25 ft	50 ft	Yes		Х			8-12 ft		Plant Guide	turkey and cedar waxwing. Slow growing and difficult to transplant.	Available
Pine, Austrian	Well - Somewhat												Non-native used mainly for ornamentals, screens and as a	
(Pinus nigra)	Poorly	Intermediate	35 ft	100 ft	No	6-7 ft		Х		8-12 ft		No	reclamation plant. Used as winter cover for various bird species.	Readily
Pine, Eastern White	Well - Somewhat	Latelanant	40.0	400.0		0.7.0	v	v	v	0.40.6	0.00	Discourse of	Squirrels and 16 species of songbirds have been known to eat the	D III
(Pinus strobus)	Poorly	Intolerant	40 ft	130 ft	Yes	6-7 ft	X	Х	Х	8-12 ft	6 - 8 ft	Plant Facts	seed. Native pine with commercial timber and ornamental value.	Readily
Pine, Loblolly	Well - Somewhat	Tolerant	50 ft	100 ft	No	6-7 ft	Х	Х		8-12 ft	6 - 8 ft	No	Important timber species. Provides some cover and browse in winte	r Readily
(Pinus, taeda)	Poorly	Tolerani	50 II	100 11	INO	0-7 IL	^	^		0-1211	0-011	NO	months to wildlife.	Readily
Pine, Scotch	Well - Moderately	Intolerant	30 ft	110 ft	No	6-7 ft		х		8-12 ft		Plant Facts	Used in windbreaks as the central or leeward rows of multi-row	Readily
(Pinus sylvestris)	Well	Intolcrant	30 It	11010	140	0-7 IC		^		0-12-10		Tiunt ructs	plantings. Important Christmas tree species. Some wildlife use.	,
Pine, Virginia	Well - Moderately	Intermediate	25 ft	70 ft	Yes	6-7 ft	Х	х		8-12 ft	6 - 8 ft	No	Native pine used primarily as pulpwood. Provides some wildlife food	Readily
(Pinus virginiana)	Well												and cover. Sometimes used in windbreaks and screens.	,
Poplar, Yellow	Moderately Well -	Intolerant	50 ft	120 ft	Yes		Х		Х	10-15 ft		Plant Facts	Fast growing. Attractive ornamental but very large. Important timber	
(Liriodendron tulipifera)	Somewhat Poorly												species in WV. Provides some secondary wildlife food.	Available
Redbud, Eastern	Well - Somewhat	Tolerant	16 ft	16 ft	Yes		Х			5-8 ft		Plant Guide	Many birds, including bobwhite quail, eat the seeds. Honeybees use	Readily
(Cercis canadensis) Redcedar. Eastern	Poorly Well - Somewhat											Plant Facts	the blossoms. Often planted as an ornamental. Eastern redcedar provides habitat for a variety of wildlife. Specific to	
(Juniperus virginiana)	Poorly	Intermediate	25 ft	80 ft	Yes	8-12 ft	X	Х		8-12 ft		Plant Guide	limestone associated sites. Cedar-apple rust host.	Readily
Serviceberry, Common	Well - Somewhat												At least 40 bird species, rabbits, chipmunks, mice, voles, foxes, and	
(Amelanchier arborea)	Poorly	Tolerant	20 ft	50 ft	Yes	8-12 ft	X			8-12 ft		Plant Guide	black bears eat the fruit. Widely used as an ornamental.	Readily
Spruce, Norway	Well - Somewhat							.,					Important as a windbreak, screen and ornamental. Winter cover for	
(Picea abies)	Poorly	Intermediate	35 ft	120 ft	No	8-12 ft *		Х		8-12 ft		No	some resident birds. Mourning doves utilize this tree for nesting.	Readily
Spruce, Red	Well - Moderately	T.1	05.0	440.0	V	0.40.6	V	v	v	0.40.6		Blood Foods	One of the most important timber and wildlife species in North	D
(Picea rubens)	Well	Tolerant	25 ft	110 ft	Yes	8-12 ft	X	Х	Х	8-12 ft		Plant Facts	America. Site specific above 3000 feet in eastern counties of WV.	Readily
Spruce, White	Well - Somewhat	Intermediate	30 ft	100 ft	No	8-12 ft	Х	Х		8-12 ft		Plant Guide	Important for screens, timber and ornamental. Winter cover and	Readily
(Picea glauca)	Poorly	memeriale	30 II	100 10	INU	0-12 11	^	^		0-12 IL		Fiant Guide	food for some birds. Hybridizes freely. Native to the northeast.	Reaulty
Sycamore, American	Moderately Well -	Intermediate	50 ft	100 ft	Yes				Х	8-12 ft		Plant Guide	Very quick growing and large. Slow decaying leaves. Prone to	Readily
(Platanus occidentalis)	Poorly	mediale	50 II	10011	1 03					0-12 IL			disease. Found along streambanks and a variety of other sites.	readily
Sweetgum	Well - Somewhat	Intolerant	40 ft	80 ft	Yes	8-12 ft			Х	8-12 ft		Plant Facts	Prefers deep soils for root development. Important as a timber,	Readily
(Liquidambar styraciflua)	Poorly					J							wildlife and ornamental. Tolerates a variety of sites and conditions.	,
Walnut, Black	Well - Moderately	Intermediate	35 ft	100 ft	Yes		Χ		Х	10-20 ft	20 X 20 ft		Prefers deep well drained soils. Important as a timber and nut crop	Readily
(Juglans nigra)	Well							l	1	l		Plant Guide	tree. Produces juglone that inhibits competition.	

^{*} These species may be utilized as stock trainers for high quality timber production.

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